

ABSTRACT

A radio frequency identification (RFID) device detection system includes an RFID device reader configured to detect RFID devices within a predetermined designated area, and two or more jamming signal transmitters configured to prevent the RFID device reader from detecting and reading devices outside of the designated area. The jamming signal transmitters may include a pair of low-frequency field generator loops driven out of phase with one another. RFID devices for use with the detection system may have a pair of antennas, one for detection by the RFID reading system, and another antenna for use in receiving signals from the jamming signal transmitters, in order to prevent communication with a wireless communication device such as an RFID chip, to which the antennas are coupled. The two antennas may be coupled to the RFID chip in parallel, with the antennas each coupled to the same contacts of the RFID chip.